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UTILITY
PATENT APPLICATION
TRANSMITTAL

5000-1-410 Attorney Docket No. Jeong-Sik CHO et al. First Inventor WIDE-BAND DISPERSION... Title

EV 326742025 US Express Mail Label No. (Only for new nonprovisional applications under 37 CFR 1.53(b)) **Assistant Commissioner for Patents** APPLICATION ELEMENTS ADDRESS TO: **Box Patent Application** See MPEP chapter 600 concerning utility patent application contents. Washington, DC 20231 Fee Transmittal Form (e.g., PTO/SB/17) CD-ROM or CD-R in duplicate, large table or (Submit an original and a duplicate for fee processing) Computer Program (Appendix) Applicant claims small entity status. 8. Nucleotide and/or Amino Acid Sequence Submission See 37 CFR 1.27. (if applicable, all necessary) opeculication [Total Pages (preferred arrangement set forth below) Computer Readable Form (CRF) - Descriptive title of the invention b. Specification Sequence Listing on: - Cross Reference to Related Applications i. CD-ROM or CD-R (2 copies); or Statement Regarding Fed sponsored R & D - Reference to sequence listing, a table, ii. paper or a computer program listing appendix Statements verifying identity of above copies - Background of the Invention - Brief Summary of the Invention ACCOMPANYING APPLICATION PARTS - Brief Description of the Drawings (if filed) - Detailed Description Assignment Papers (cover sheet & document(s)) - Claim(s) Power of 37 CFR 3.73(b) Statement - Abstract of the Disclosure 10. Attorney (when there is an assignee) English Translation Document (if applicable) 11. Drawing(s) (35 U.S.C. 113) [Total Sheets Copies of IDS Information Disclosure 5. Oath or Declaration [Total Pages Citations Statement (IDS)/PTO-1449 Preliminary Amendment 13. Newly executed (original or copy) Copy from a prior application (37 CFR 1.63 (d)) (for continuation/divisional with Box 18 completed) Return Receipt Postcard (MPEP 503) (Should be specifically itemized) Certified Copy of Priority Document(s) (if foreign priority is claimed) DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) Request and Certification under 35 U.S.C. 122 named in the prior application, see 37 CFR 16 1.63(d)(2) and 1.33(b). (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent. Application Data Sheet. See 37 CFR 1.76 17. Other: 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) of prior application No.:___ Prior application information: Examiner Group Art Unit: For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 19. CORRESPONDENCE ADDRESS 33942 Customer Number or Bar Code Label Correspondence address below (Insert Customer No. or Attach bar code label here) Name Address 4 8 1 State Zip Code Fax Country Telephone Registration No. (Attorney/Agent) |44,069|Steve S. Cha Name (Print/Type)

Burden Hour Statement: This form is estimated to lake 1.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete his form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.



PTO/SB/17 (01-03)
Approved for use through 04/30/2003. OMB 0651-0032
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FEE TRANSMITTAL for FY 2003

(\$) 790.00

Effective 01/01/2003, Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

Steve S. Cha

Name (Print/Type)

Signature

TOTAL AMOUNT OF PAYMENT

Complete if Known					
Application Number	Not yet assigned				
Filing Date	August 5, 2003				
First Named Inventor	Jeong-Sik CHO et al.				
Examiner Name	Not yet assigned	-			
Art Unit	Not yet assigned				
Attorney Docket No.	5000-1-410				

METHOD OF PAYMENT (check all that apply) FEE CALCULATION (continued)					ECALCULATION (continued)		
Check Credit card Money Other None	3. ADDITIONAL FEES						
Deposit Account:		Large Entity Small Entity					
Deposit Account: Deposit Account 502-470	Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid	
Number	1051	130	2051	65	Surcharge - late filing fee or oath		
Deposit Account CHA & REITER	1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet		
Name The Commissioner is authorized to: (check all that apply)	1053	130	1053	130	Non-English specification		
Charge fee(s) indicated below Credit any overpayments		2,520	1812	2,520	For filing a request for ex parte reexamination		
Charge any additional fee(s) during the pendency of this application	1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action		
Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.		1,840*	1805	1,840*	Requesting publication of SIR after Examiner action		
FEE CALCULATION	1251	110	2251	55	Extension for reply within first month	1	
	1252	410	2252	205	Extension for reply within second month		
1. BASIC FILING FEE Large Entity Small Entity	1253	930	2253	465	Extension for reply within third month		
Fee Fee Fee Fee Description Fee Paid	1254	1,450	2254	725	Extension for reply within fourth month		
Code (\$) Code (\$) 1001 750 2001 375 Utility filing fee	1255	1,970	2255	985	Extension for reply within fifth month		
1002 330 2002 165 Design filing fee 750.00	1401	320	2401	160	Notice of Appeal		
1003 520 2003 260 Plant filing fee	1402	320	2402	160	Filing a brief in support of an appeal		
1004 750 2004 375 Reissue filing fee	1403	280	2403	140	Request for oral hearing		
1005 160 2005 80 Provisional filing fee	1451	1,510	1451	1,510	Petition to institute a public use proceeding		
SUBTOTAL (1) (\$) 750.00	1452	110	2452	55	Petition to revive - unavoidable		
	1453	1,300	2453	650	Petition to revive - unintentional		
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE	1501	1,300	2501	650	Utility issue fee (or reissue)		
Extra Claims below Fee Paid	1502	470	2502	235	Design issue fee		
Total Claims 19 -20** = X = X	1503	630	2503	315	Plant issue fee		
Claims X X X Multiple Dependent	1460	130	1460	130	Petitions to the Commissioner		
	1807	50	1807	7 50	Processing fee under 37 CFR 1.17(q)		
Large Entity Small Entity Fee Fee Fee Fee Fee Description	1806	180	1806		Submission of Information Disclosure Stmt		
Code (\$) Code (\$)	8021	40	802	1 40	Recording each patent assignment per property (times number of properties)	40.00	
1202	1809	750	2809	375	Filing a submission after final rejection (37 CFR 1.129(a))		
1203 280 2203 140 Multiple dependent claim, if not paid	1810	750	2810	375	For each additional invention to be	\vdash	
1204 84 2204 42 ** Reissue independent claims over original patent	1801	750	2801	375	examined (37 CFR 1.129(b)) Request for Continued Examination (RCE)		
1205 18 2205 9 ** Reissue claims in excess of 20	1802	900	1802	900	Request for expedited examination		
and over original patent	Other	fee (sp	ocife)		of a design application		
SUBTOTAL (2) (\$) 0.00			• • • •	Filing F	ee Paid SUPTOTAL (2) (2)		
**or number previously paid, if greater; For Reissues, see above *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 40.00							
				_	(Complete (if applicable)		

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Registration No.

ttorney/Agent)

44,069

Telephone 201-518-5518

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.